

REMARKS

Claims 1-19 and 40-41 are under examination and have been rejected. In response to the Restriction requirement, Applicants elected claims 1-19 and 40 of Group II and, for search purposes, the species of compound 123 at page 67 of the application. Applicants added claim 41, directed to the elected compound, by prior amendment.

Status of the Claims

Applicants respectfully contend that the statement in the last line of page 2 of the Office Action is confusing in that it states that the subject matter of claim 41 recites subject matter not embraced by Applicants' election of invention. The Examiner is reminded that claim 41 recites only one compound, which was Applicants' elected species. Further description of this point is presented below.

Rejection Under 35 U.S.C. 112, ¶2

Claims 1-19, 40 and 41 were rejected under 35 U.S.C. 112, paragraph 2, as indefinite. The Examiner indicates that formula I and II of claim 1 recites as a substituent the group labeled "R₅" but fails to recite a limitation for this substituent. The Examiner suggests that such a limitation is to be found at page 16, lines 3-7, of the application.

In response, Applicants respectfully direct the Examiner's attention to the Amendment filed on 22 April 2005, at page 3, lines 4-8, where a description and limitations for "R₅" are recited (see page 3, lines 4-8, of the amendment). In addition, Applicants direct the Examiner's attention to the filed application, at page 72, lines 3-7, where the same limitation for "R₅" in claim 1 is contained. Applicants note that this

limitation is the same as that disclosed on page 16, lines 3-7, of the application as filed.

Thus, the recited limitation for "R₅" is already in claim 1 and Applicants believe that no further amendment to claim 1 is required to overcome this ground of rejection. Applicants request that this ground of rejection be withdrawn.

Objection

Claims 1-19, 40 and 41 were objected to as reciting non-elected subject matter based on the response to the restriction, such as heterocycle, heteroaryl, morpholine, piperazine, pyrrolidine, etc.

In response, Applicants have amended the claims to achieve this result.

Applicants had elected the invention of Group II, drawn to claims 1-19 and 40, covering Formulas (I) or (II), wherein the variables R₁, R₂, R₃ and R₄ independently do not represent heteroaryl or heterocycloalkyl and are not substituted with these; the heterocycloalkyl or heteroaryl of variables R₅, X or Y represents piperidine or pyridine, or variables R₃ or R₄ are connected together to form a 4- or 7- membered heterocycle piperidine or pyridine thereof and the variables a, b and c are as defined in claim 1.

Applicants had elected the species of compound 123, now recited specifically in claim 41.

In particular, claim 1 has been amended to recite "pyridine" in place of "heteroaryl" and "piperidine" in place of "heterocycloalkyl" in the definitions of "R₅", X and Y and the terms "heteroaryl" and "heterocycloalkyl" have been deleted elsewhere in claim 1 where appropriate to meet the elected subject matter (i.e., from definitions of R₁, R₂ and R₄).

As already noted, Applicants find confusing the rejection of claim 41, drawn only to the structure of compound 123 (described at page 68 of the application as filed). This species is covered by Formula I of claim 1 wherein

R₁ is benzyl (i.e., unsubstituted arylalkyl of claim 1 where the aryl is phenyl),

R₂ is 3,4-dichlorobenzyl (i.e., substituted arylalkyl of claim 1 where the aryl is phenyl and "dichloro-" is the substitution),

R₃ is not present for "a" is 0,

R₄ is hydrogen (as recited in claim 1),

X is piperidine (i.e., recited in amended claim 1 where "b" is 1).

Y is not present for "c" is 0, and

R₅ is benzyl (i.e., unsubstituted arylalkyl of claim 1 where the aryl is phenyl).

Thus, this compound falls within the elected subject matter of Group II and claim 41 should be allowed.

In addition, Applicants respectfully remind the Examiner that Group II, when describing the R₅ substituents, refers to the heteroaryl or heterocycloalkyl as being limited to piperidine or pyridine. However, R₅ is not limited to being just heteroaryl (pyridine) or heterocycloalkyl (piperidine) so that only if R₅ is a heteroaryl or heterocycloalkyl then it is limited to one of piperidine or pyridine but R₅ need not be a heteroaryl or heterocycloalkyl at all in the elected species in order for Applicants to elect Group II.

Applicants Have amended claim 40 to delete the names of compounds believed to lie outside the elected subject matter of amended claim 1 and therefore believe that, absent any prior art, claim 40 should be allowed.

The Examiner has also noted that the rejected claims, which includes the dependent claims, fall partly within the elected subject matter and partly outside of it.

Thus, Applicants endeavor to justify the dependent claims.

Claims 2 and 3 depend from amended claim 1 with all limitations therein. In addition, these claims cover the elected species of claim 1 (compound 123 of page 61 of the application and in claim 41) wherein R_1 is unsubstituted benzyl. Because benzyl is neither heteroaryl nor heterocycloalkyl, this is a valid substituent for R_1 within the elected invention of Group II. These claims also cover other substituents at R_1 that are within the elected invention of Group II in that each is neither heteroaryl nor heterocycloalkyl. Consequently, Applicants believe that these claims overcome the objection and should be allowed.

Claim 4 depends from amended claim 1 and contains all of the limitations thereof. In addition, this claim covers the elected species of claim 1 wherein R_2 is substituted arylalkyl (i.e., substituted benzyl with phenyl as the aryl moiety). Because arylalkyl (a substituted benzyl) is neither heteroaryl nor heterocycloalkyl, this is a valid substituent for R_1 within the elected invention of Group II. The other structures recited for R_2 are likewise within the subject matter of Group II in that each is neither heteroaryl nor heterocycloalkyl. Consequently, Applicants believe that this claim does not fall within the objection and should be allowed.

Claim 5 depends from claim 1 and contains all limitations thereof. In addition, claim 5 covers the elected species wherein the arylalkyl is substituted with 3,4-dichloro. The other structures recited for R_2 are likewise not barred by Group II in that each is neither heteroaryl nor heterocycloalkyl as required in the restriction. Consequently, Applicants believe that this claim does not fall within the objection and should be allowed.

Claim 6 depends from claim 1 and contains all limitations thereof. In addition, claim 6 recites structures for R_3 that are within the election of Group II in that each is neither heteroaryl nor heterocycloalkyl. Consequently, Applicants believe that this claim does not

fall within the objection and should be allowed.

Claim 7 depends from claim 1 and contains all limitations thereof. In addition, claim 7 covers the elected species wherein R_4 is H. This, as well as the recited lower alkyl, is within the elected subject matter in that each is neither heteroaryl nor heterocycloalkyl. Consequently, Applicants believe that this claim does not fall within the objection and should be allowed.

Claim 8 depends from claim 1 and has been amended to recite that R_3 and R_4 form a pyridine ring. Consequently, Applicants believe that this claim does not fall within the objection and should be allowed.

Claim 9 has been amended to depend from claim 1 instead of claim 8 and to recite that R_3 and R_4 form a piperidine ring. Consequently, Applicants believe that this claim does not fall within the objection and should be allowed.

Claim 10 depends from claim 1 and has been amended to delete recitation of heterocycle and heteroaryl. The recited alkyl, heteroalkyl and aryl are each within the elected subject matter in that each is neither heteroaryl nor heterocycloalkyl as required in the restriction. Consequently, Applicants believe that this claim as amended does not fall within the objection and should be allowed.

Claim 11 has been amended to recite that X is pyridine, which is within the elected subject matter. Consequently, Applicants believe that this claim does not fall within the objection and should be allowed.

Claim 12 covers the elected species wherein X is piperidine and this claim has been amended to depend from claim 1 instead of claim 11. Consequently, Applicants believe that this claim does not fall within the objection and should be allowed.

Claim 13 covers the elected species wherein Y is a bond (i.e., c is 0 as allowed in claim 1). It has been amended to delete heterocycle and heteroaryl.

Claim 14 has been amended to depend from claim 1 and to recite that Y is pyridine or piperidine, in accordance with the restriction. Thus, it recites elected subject matter and should be allowed.

Claim 15 recites that Y is COO. This is within the elected subject matter in that it is neither heteroaryl nor heterocycloalkyl. Consequently, Applicants believe that this claim does not fall within the objection and should be allowed.

Claim 16 depends from claim 1 and claim 17 from claim 16 so each contains the limitations of amended claim 1. In addition, they cover the elected species wherein R₅ is unsubstituted arylalkyl of claim 1 (i.e., benzyl with phenyl as the aryl moiety and methylene as the alkyl). The other recited substituents are each within the elected subject matter in that each is neither heteroaryl nor heterocycloalkyl. Consequently, Applicants believe that this claim does not fall within the objection and should be allowed.

Claim 18 depends from claim 17 and covers the elected species wherein R₅ is benzyl (unsubstituted aralkyl of claim 1). Since each is neither heteroaryl nor heterocycloalkyl, Applicants believe that this claim recites only elected subject matter and does not fall within the objection, so it should be allowed.

Claim 19 covers the elected species in that it refers to a composition thereof and compositions of any of the compounds of amended claim 1. Consequently, this claim avoids the objection, based on the amendment of claim 1, and should be allowed.

Claim 40 was further objected to as containing a typographical error in that there was no comma (or ",") after each of the named compounds. In response, claim 40 has

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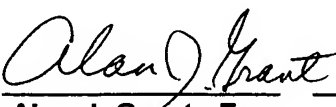
been amended to accomplish this result and Applicants request that this ground of rejection be withdrawn.

Request for Rejoinder

Applicants respectfully request that claims 20-24, drawn to methods of using the compounds of claim 1, be rejoined and allowed to issue with claim 1 since these claims are limited to use of the compounds in amended claim 1.

Based on the foregoing amendments and remarks, Applicants believe that the claims are in condition for allowance and respectfully request that the Examiner reconsider the rejection and pass at least the non-withdrawn claims to issue.

The Commissioner is authorized to charge payment of any additional fees required for this communication or credit any overpayment to Deposit Account No. 03-0678.

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| <p><u>FIRST CLASS CERTIFICATE</u></p> <p>I hereby certify that this correspondence is being deposited today with the U.S. Postal Service as First Class Mail in an envelope addressed to:</p> <p>Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450</p> <p> 12/7/05 Alan J. Grant, Esq. Date</p> |
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Respectfully submitted,



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